



west virginia department of environmental protection

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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2925	After-the-Fact
Plant ID No.:	081-00022	
Applicant:	Goals Coal Company	
Facility Name:	Goals Preparation Plant and Screening Facility	
Location:	Sundial, Raleigh County	
SIC Codes:	1221 (Bituminous Coal & Lignite - Surface) 1222 (Bituminous Coal & Lignite - Underground)	
NAICS Codes:	212111 (Bituminous Coal and Lignite Surface Mining) 212112 (Bituminous Coal Underground Mining)	
Application Type:	Modification	
Received Date:	December 15, 2011	
Engineer Assigned:	Dan Roberts	
Fee Amount:	\$2,000	
Date Received:	December 19, 2011	
Complete Date:	February 16, 2012	
Applicant Ad Date:	December 21, 2011	
Newspaper:	<i>The Register-Herald</i>	
UTM's:	Easting: 453.9 km Northing: 4192.4 km Zone: 17	
Description:	After-the-Fact modification to do the following: combined the equipment from current permits R13-2188C and R13-2482B into one new permit; increase the maximum hourly throughput of railcar loadout silo BS1 from 1,600 TPH to 5,000 TPH and increase the controls on this transfer point to a water spray and partial enclosure; increase the maximum throughputs of conveyor C1 from 1,400 TPH and 8,300,000 TPY to 1,600 TPH and 8,715,000 TPY; increase the maximum hourly throughput rate for the refuse circuit from 440 TPH to 650 TPH; add the three (3) conveyors and one (1) stockpile from the Parker Peerless Mine which were constructed in March of 2008; add unpaved haulroad trucking from the surface mine to B1/OS1; add a bypass chute from conveyor C12 to conveyor BC13; add a partial enclosure to conveyors BC1, BC2, BC6, BC13 and BC16; delete permitted equipment which was never constructed or was constructed and then removed; renumber the transfer points at the screening section of the facility currently permitted under R13-2482B; combine current open storage piles OS3 through OS8 permitted under R13-2188C and rename the new open storage pile as OS1.	

BACKGROUND

This facility is currently operating under permit R13-2188C issued to Goals Coal Company on May 19, 2003 for the modification of the wet wash coal preparation plant and to remove the thermal dryer from service and permit R13-2482B issued to Independence Coal Company, Inc. on June 29, 2005 for a Class II administrative update to modify the raw coal screening facility and add a second train loadout silo. These two facilities are located on one or more contiguous or adjacent properties, are under common control of the same person (or persons under common control) and belong to a single major industrial grouping. Therefore, these facilities meet the definition of “Building, Structure, Facility, or Installation” in 45CSR14.2.10 and “Major Source” in 45CSR30.2.26 and have been considered as one facility for determining applicability to 45CSR14 (PSD) and 45CSR30 (Title V).

This application involves combining existing permit R13-2188C issued to Goals Coal Company and permit R13-2482B issued to Independence Coal Company, Inc. Therefore, permits R13-2188C and R13-2482B will be superseded and replaced by proposed permit R13-2925 to be issued to Goals Coal Company.

On November 14, 2011, Independence Coal Company, Inc. (“Company”) and the DAQ entered into Consent Order CO-R13-E-2011-21. The Findings of Fact stated that the Company was permitted under permit R13-2482B to load a maximum of 1,600 TPH of coal from the rail car loadout silo to railcars, but that the Company had been exceeding their permit limit since June 2008 and approximated that the loading rate had been 4,500 TPH for the unit trains. Also, the Company needed to update their Rule 13 permit to reflect “as built” construction. The Company paid a civil administrative penalty of \$48,150 to resolve the violation described in the Consent Order and submitted permit application R13-2925 on December 15, 2011.

DESCRIPTION OF PROCESS

Goals Coal Company (Goals) and Independence Coal Company, Inc. (Independence) propose to combine the current R13 permits for the Goals Preparation Plant and Independence Sundial Screening Facility in pending permit R13-2925 under Goals Coal Company. The company also proposes to increase the hourly rate of the railcar loadout silo BS1 (FE) from 1,600 TPH to 5,000 TPH and to increase the controls on the railcar loading transfer point TP17 to include a water spray and partial enclosure. The hourly rate on conveyor C1 (PE) is proposed to increase from 1,400 TPH to 1,600 TPH and the yearly throughput from 8,300,000 TPY to 8,715,000 TPY. Due to variability in the recovery rate of the clean coal/refuse, the hourly refuse rate is being increased from 440 TPH to 650 TPH. The yearly throughput for the facility is not proposed to change. This application also removes from the permit unconstructed and removed equipment and adds conveying and stockpiling from the Parker Peerless Mine constructed in March of 2008.

With this application, Goals is submitting a re-calculated facility Potential to Emit (PTE) and has renumbered the transfer points at the screening section of the facility. Existing equipment IDs are unchanged from the existing permits. Existing coal open storage piles OS-3 through OS8 (from permit R13-2482B) have been combined into one open storage pile OS1 (N). OS1 (N) may consist of multiple piles in the area of the reclaim feeder breakers CR1 (FE), CR2 (FE) and CR3 (FE).

Raw/Direct Ship Circuit

Trucks dump coal to open storage pile OS1 (N) or truck dump bin B1 (PE) at transfer point TP1 (MD). Coal from B1 (PE) transfers to No. 5 Belt (BC6/PE). Coal from OS1 (N) is reclaimed by three (3) feeder breakers CR1 (FE), CR2 (FE) and CR3 (FE) and transferred through transfer point TP2 (FE) to No. 5 Belt (BC6/PE). No. 5 Belt (BC6/PE) feeds crusher CR4 (FE) at transfer point TP3 (FE) and the coal is then transferred to No. 3 Belt (BC1/PE) at transfer point TP4 (PE).

Coal from the Parker Peerless Mine exits on conveyor PPBC1 (PE) and is transferred to open storage pile OS2 (N) at transfer point TP-5 (MD). Coal from OS2 (N) is reclaimed by conveyor PPBC2 (PE) at transfer point TP6 (FE); transferred to conveyor PPBC3 (PE) at transfer point TP7 (PE) and then transferred via a drop tube to No. 3 Belt (BC1/PE) at transfer point TP8 (PE). Coal from No. 3 Belt (BC1/PE) is transferred to No. 2 Belt (BC2/PE) at transfer point TP9 (PE) and then to screen SC1 (FE) at transfer point TP10 (PE). Pass through coal from SC1 (FE) drops to conveyor C1 (PE) at transfer point TP13 (PE) and is transferred either to raw coal silo S1 (FE) at transfer point TP28 (FE) or to conveyor BC16 (PE) at transfer point TP14 (PE). Conveyor BC16 (PE) transfers the coal through a drop tune to conveyor BC13 (PE) at transfer point TP15 (PE) and then to loadout silo BS1 (FE) at transfer point TP16 (FE) and finally to railcars at transfer point TP17 (PE+WS).

Trucks also dump coal to hopper TH1 (PE) at transfer point T1 (MC) and then to conveyor C1A (PE) at transfer point T2 (FE), then to conveyor C2 (PE) at transfer point T3 (FE) and then to sizer unit SR1 (FE) at transfer point T4 (FE). Coal is transferred from SR1 (FE) to conveyor C3 (PE) at transfer point T7 (FE) and then to S1 (FE) at transfer point T8 (FE). Coal is reclaimed from S1 (FE) by conveyor C4 (PE) at transfer point T9 (FE) and then transferred to the wet wash circuit of the preparation plant.

Clean Coal Circuit

Clean coal exits the preparation plant on conveyor C10 (PE) then to conveyor C12 (MC) at transfer point T19 (PE) and either trips off the belt via a chute directly to the loadout belt BC13 (PE) at transfer point TP47 (PE) or transfers to open storage pile OS3 (MC) or conveyor C13 (MC) at transfer point T22 (MC). C13 (MC) transfers coal to open storage pile OS4 (MC) or conveyor C13A (MC) at transfer point T29 (MC). C13A (MC) transfers coal to open storage pile OS5 (MC) at transfer point T30 (MC). Coal is reclaimed from OS3 (MC), OS4 (MC) and OS5 (MC) by conveyor C17 (MC) at transfer points T31 (FE), T32 (FE), T33 (FE) and T34 (FE), and then transferred to the loadout conveyor BC13 (PE) at transfer point T37 (MC). Clean coal can also be truck dumped at open storage pile OS6 (MC) at transfer point T20 (MC) and then loaded to railcar by endloader at transfer point T21 (MC).

Refuse Circuit

Scalped material from screen SC1 (FE) is transferred to conveyor BC3 (PE) at transfer point TP11 (FE) and is then transferred to the refuse conveyor C5A (PE) at transfer point TP12 (PE). Refuse leaves the preparation plant on conveyor C5 (PE) and is transferred to C5A (PE) at transfer point T10 (FE). Refuse is then conveyed from C5A (PE) to C5B (MC) at transfer point T11 (PE)

then to C5C (MC) at transfer point T43 (MC) then to C5D (MC) at transfer point T44 (MC) then to radial stacker RS1 (MC) at transfer point T45 (MC) and finally to the refuse pile at transfer point T46 (MC).

Other Permit Revisions

The following equipment from permit R13-2482B is requested to be removed from the new permit: existing OS1 stockpiling from Hazy underground mine; existing OS2 open storage pile which fed conveyor BC5; conveyors BC4, BC5, BC8, BC9, BC11, BC12, and radial stacker BC18; screen SC2; and conveyor BC17 and rail loadout silo BS2, which was permitted but never constructed.

The following equipment from R13-2188C is requested to be removed from the permit: belt conveyor BC18; and rail loadout bin B4 which is retired in place.

Note that open storage pile IDs are re-used from R13-2482B: the existing OS3-OS7 open storage piles are combined to form OS1, and OS2 is re-used as the Parker Peerless mine open storage pile. From R13-2188C, OS1 is re-numbered to OS6; OS2 becomes OS3; OS3 becomes OS4; and OS4 becomes OS5.

The facility shall be constructed and operated in accordance with the following equipment and control device information taken from permit applications R13-2925, R13-2188C, R13-2188, R13-2482B, R13-2482A and R13-2482 and any amendments thereto:

Equip- ment ID #	Date of Construction, Reconstruction or Modification	Emission Unit Description	Design Capacity		Control Device ²
			TPH	TPY	
Parker Peerless Mine Circuit					
PPBC1	C 3/2008 ³	Raw Coal Belt Conveyor - receives deep mined raw coal from the Parker Peerless Deep Mine and transfers it to OS2	1,500	8,715,000	PE
OS2	C 3/2008 ³	Deep Mined Raw Coal Open Storage Pile - 50,000 ton capacity - 52,272 ft ² base area - receives deep mined raw coal from PPBC1, stores it and then an underground feeder reclaim it to PPBC2	1,500	8,715,000 combined with OS1	N
PPBC2	C 3/2008 ³	Raw Coal Belt Conveyor - receives deep mined raw coal from OS2 via an underground feeder and transfers it to PPBC3	1,500	8,715,000	PE
PPBC3	C 3/2008 ³	Raw Coal Belt Conveyor - receives deep mined raw coal from PPBC2 and transfers it through a drop tube to BC1 (see Raw Coal Circuit below)	1,500	8,715,000	PE
Surface Mined Raw Coal Circuit					
B1	C 2003	Truck Dump Bin - 160 ton capacity - receives surface mined raw coal from trucks and then drops it to BC6	1,600	8,715,000	PE
OS1	C 2011	Surface Mined Raw Coal Open Storage Pile - 230,000 ton capacity - 226,512 ft ² base area - receives raw coal from B1 and trucks, stores it and then underground feeders reclaim it to CR1, CR2 or CR3	1,600	8,715,000 combined with OS2	N

Equip- ment ID #	Date of Construction, Reconstruction or Modification	Emission Unit Description	Design Capacity		Control Device ²
			TPH	TPY	
CR1	C 2003	Raw Coal Primary Crusher - receives surface mined raw coal from OS1 via underground feeders, crushes it from +4" to +2"x0 and then drops it to BC6	1,600	8,715,000 combined	FE
CR2	C 2003	Raw Coal Primary Crusher - receives surface mined raw coal from OS1 via underground feeders, crushes it from +4" to +2"x0 and then drops it to BC6	1,600		FE
CR3	C 2003	Raw Coal Primary Crusher - receives surface mined raw coal from OS1 via underground feeders, crushes it from +4" to +2"x0 and then drops it to BC6	1,600		FE
BC6	C 2003	Raw Coal No. 5 Belt Conveyor - receives surface mined raw coal from B1, CR1, CR2 and CR3 and transfers it to CR4	1,600	8,715,000	PE
CR4	C 2003	Raw Coal Secondary Crusher - receives surfaced mined raw coal from BC6, crushes it from +2"x0 to -2"x0 and then drops it to BC1 (see below)	1,600	8,715,000	FE
BC1	M 1998	Raw Coal No. 3 Belt Conveyor - receives surfaced mined raw coal from CR4 and deep mined coal from PPBC3 and transfers it through an underground pass to BC2	1,600	8,715,000	PE
BC2	M 1998	Raw Coal No. 2 Belt Conveyor - receives raw coal from BC1 and transfers it to SC1	1,600	8,715,000	PE
SC1	M 1998	Single Deck Raw Coal Screen - receives raw coal from BC2, classifies it and then drops it the -2" coal to C1 and the +2" refuse to BC3 (see Refuse Circuit below)	1,600	8,715,000	FE
C1	M 2011 C 1997	Raw Coal Belt Conveyor - receives sized raw coal from SC1 and transfers it to BC16 or S1 (see Foreign Raw Coal Circuit below)	1,600	8,715,000	PE
BC16	C 2003	Raw Coal Belt Conveyor - receives sized raw coal from C1 and transfers it through a drop tube to BC13 (see Clean Coal Circuit below)	1,600	8,715,000	PE
Foreign Raw Coal Circuit					
TH1	C 1976	Truck Dump Hopper Bin - 100 ton capacity - receives foreign raw coal from trucks and then drops it to C1A	800	5,529,600	PE
C1A	C 1976	Foreign Raw Coal Belt Conveyor - receives foreign raw coal from TH1 and transfers it to C2	800	5,529,600	PE
C2	C 1976	Foreign Raw Coal Belt Conveyor - receives foreign raw coal from C1A and transfers it to SR1	800	5,529,600	PE
SR1	C 2001	Foreign Raw Coal Sizer - receives foreign raw coal from C2, crushes it and then drops it to C3	800	5,529,600	FE
RB1	<i>Retired in Place 2002</i>	<i>Rotary Breaker - receives foreign raw coal from C2, crushes it and then drops the sized coal to C3 and the reject to B1</i>	-----	-----	<i>FE</i>
B1	<i>Retired in Place 2002</i>	<i>Reject Truck Loadout Bin - 45 ton capacity - receives reject from RB1, temporarily stores it and then loads it to trucks</i>	-----	-----	<i>FE</i>
C3	C 1976	Raw Coal Belt Conveyor - receives crushed foreign raw coal from SR1 and transfers it to S1	800	5,529,600	PE
S1	M 2011 C 1976	Raw Coal Silo - 10,000 ton capacity - receives crushed foreign raw coal from C3 and sized raw coal from C1, stores it and then drops it to C4	1,600 in 1,200 out	8,300,000	FE

Equipment ID #	Date of Construction, Reconstruction or Modification	Emission Unit Description	Design Capacity		Control Device ²
			TPH	TPY	
C4	C 1998	Raw Coal Belt Conveyor - receives crushed foreign raw coal from S1 and transfers it to the wet wash circuit	1,200	8,300,000	PE
<i>Thermal Dryer Circuit - Retired in Place</i>					
C6	Retired in Place 2002	Thermal Dryer Feed Belt Conveyor - receives clean coal from the wet wash prep plant and transfers it to the thermal dryer	-----	-----	PE
TD	Retired in Place 2002	Thermal Dryer - receives clean coal from C6, dries it and then drops it onto C8 or C9	-----	-----	FE
C8	Retired in Place 2002	Thermal Dryer Belt Conveyor - receives thermally dried coal from the TD and transfers it to C10	-----	-----	PE
C9	Retired in Place 2002	Thermal Dryer Fuel Feed Conveyor - receives thermally dried coal from the TD and transfers it back to the fuel bin for the TD	-----	-----	PE
C11	Retired in Place 2002	Ash Belt Conveyor - receives ash from the TD and transfers it to B3	-----	-----	FE
B3	Retired in Place 2002	Ash Truck Loadout Bin - 45 ton capacity - receives ash from C11, temporarily stores it and then loads it to trucks	-----	-----	FE
Clean Coal Circuit					
C10	C 1998	Clean Coal Belt Conveyor - receives clean coal from the wet wash circuit and transfers it to C12	720	4,980,000	PE
C12	C 1998	Clean Coal Belt Conveyor - receives clean coal from C10 and transfers it through a chute to BC13 (see below), OS3 or C13	720	4,980,000	N
OS3	C 1998	Clean Coal Open Storage Pile with Stacking Tube - 35,000 ton capacity - 26,136 ft ² base area - receives clean coal from C12, stores it and then an underground feeder reclaims it to C17 (see below)	720 in 1,600 out	4,980,000 combined with OS4, OS5 & OS6	N
C13	C 1998	Clean Coal Belt Conveyor - receives clean coal from C12 and transfers it to OS4 or C13A	720	4,980,000	N
OS4	C 1998	Clean Coal Open Storage Pile with Stacking Tube - 35,000 ton capacity - 26,136 ft ² base area - receives clean coal from C13, stores it and then an underground feeder reclaims it to C17 (see below)	720 in 1,600 out	4,980,000 combined with OS3, OS5 & OS6	N
C13A	C 1998 ⁴	Clean Coal Belt Conveyor - receives clean coal from C13 and transfers it to OS5	720	4,980,000	N
OS5	C 1998	Clean Coal Open Storage Pile with Stacking Tube - 35,000 ton capacity - 26,136 ft ² base area - receives clean coal from C13A, stores it and then an underground feeder reclaims it to C17 (see below)	720 in 1,600 out	4,980,000 combined with OS3, OS4 & OS6	N
C17	C 1998	Clean Coal Belt Conveyor - receives clean coal from OS3, OS4 and OS5 via underground feeders and transfers it to BC13	1,600	4,980,000	N
BC13	C 2003	Clean Coal Belt Conveyor - receives clean coal from C17, C12 and BC16 (see Surface Mined Raw Coal Circuit above) and transfers it to BS1	1,600	8,715,000	PE
BS1	M 2011 C 2003	Loadout Silo - 10,000 ton capacity - receives coal from BC13, stores it temporarily and then loads it to rail cars	1,600 in 5,000 out	8,715,000	FE

Equipment ID #	Date of Construction, Reconstruction or Modification	Emission Unit Description	Design Capacity		Control Device ²
			TPH	TPY	
OS6	C 1998	Clean Coal Open Storage Pile - 80,000 ton capacity - 60,984 ft ² base area - receives clean coal trucked from OS3, OS4 and OS5, stores it and then an endloader transfers it directly to rail cars	720	3,000,000 combined with OS3, OS4 & OS5	N
B4	Retired in Place	Clean Coal Rail Car Loadout Bin - 200 ton capacity - receives clean coal from C18 (which was removed), temporarily stores it and then loads it to rail cars	-----	-----	FE
Refuse Circuit					
BC3	M 2011 M 1998	Refuse Belt Conveyor - receives +2" refuse from SC1 and transfers it to C5A (see below)	650	415,000	PE
C5	M 2011 C 1998	Refuse Belt Conveyor - receives refuse from the wet wash circuit and transfers it to C5A	650	3,045,000	PE
C5A	M 2011 C 1998	Refuse Belt Conveyor - receives refuse from C5 and BC3 (see above) and transfers it to C5B	650	3,045,000	PE
C5B	M 2011 C 2001	Refuse Belt Conveyor - receives refuse from C5A and transfers it to C5C	650	3,045,000	N
C5C	M 2011 C 2001	Refuse Belt Conveyor - receives refuse from C5B and transfers it to C5D	650	3,045,000	N
C5D	M 2011 C 2001	Refuse Belt Conveyor - receives refuse from C5C and transfers it to RS1	650	3,045,000	N
RS1	C 2011	Refuse Radial Stacker - receives refuse from C5A and transfers it to the refuse disposal area	650	3,045,000	N
Haulroads					
PHR1	1976	Raw Coal (tri-axle) - 0.66 miles per trip - Maximum of 13 trips per hour and 85,071 trips per year - 65 ton load weight	800	5,529,600	WS
UPHR1	1976	Raw Coal Trucks (tri-axle) - 0.16 miles per trip - Maximum of 13 trips per hour and 85,071 trips per year - 65 ton load weight	800	5,529,600	WS
UPHR3	1998	Clean Coal Trucks - 0.28 miles per trip - Maximum of 16 trips per hour and 67,667 trips per year - 45 ton load weight	720	3,045,000	WS
UPHR4	1998	Endloader Operation - 1.0 miles per trip - Maximum of 1 trip per hour and 8,000 trips per year	-----	-----	WS
-----	2011	Raw Coal Trucks (Cat 777 from surface mine) - 0.29 miles per trip - Maximum of 15 trips per hour and 81,793 trips per year - 107 ton load weight	1,600	8,715,000	WS

¹ In accordance with 40 CFR 60 Subpart Y, coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after October 27, 1974 but on or before April 28, 2008 shall not discharge gases which exhibit 20 percent opacity or greater. Coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater. For open storage piles constructed, reconstructed, or modified after May 27, 2009, the permittee shall prepare and operate in accordance with a fugitive coal dust emissions control plan that is appropriate for site conditions.

² Control Device Abbreviations: FE - Full Enclosure; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; and N - None.

³ Conveyors PPBC1, PPBC2 and PPBC3 and open storage pile OS2 were constructed in March of 2008, but were not permitted until 2012 within permit R13-2925.

⁴ Conveyor BC13A was constructed in 1998, but was not permitted until 2012 within permit R13-2925.

SITE INSPECTION

Fred Teel of the DAQ's Compliance and Enforcement Section performed a full on-site inspection on June 6, 2011. The contacts at the facility were James Crawford and Mike Milam. The facility was given a Status Code 10 - Out of Compliance.

On November 14, 2011, Independence Coal Company, Inc. ("Company") and the DAQ entered into Consent Order CO-R13-E-2011-21. In the Findings of Fact, it stated that the Company was permitted under permit R13-2482B to load a maximum of 1,600 TPH of coal from the rail car loadout silo to railcars, but that the Company had been exceeding their permit limit since June 2008 and approximated that the loading rate had been 4,500 TPH for the unit trains. Also, the Company needed to update their Rule 13 permit to reflect as built construction. The Company paid a civil administrative penalty of \$48,150 to resolve the violation described in the Consent Order and submitted permit application R13-2925 on December 15, 2011.

Directions from Charleston are to take Interstate I-77 South/Interstate I-64 East toward Beckley and travel 5.0 miles, take the WV-94 Exit 89 toward WV-61/Marmet/Chesapeake, turn right onto Lens Creek Road and follow WV-94 for 9.8 miles, keep left at the fork to continue on WV-94 and travel 0.3 miles, then turn slight left onto WV-3 Coal River Road and travel 28.2 miles to the facility. The facility is 0.4 miles Northwest of Sundial, WV along WV-3.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, crushing and screening, storage piles, and paved and unpaved haulroads are based on AP-42 Fifth Edition "Compilation of Air Pollution Emission Factors", Volume 1. Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The emission factors for crushing/breaking and screening operations were obtained from the Air Pollution Engineering Manual - Air & Waste Management Association - June 1992. The calculations were performed by the applicant's consultant and were checked for accuracy and completeness by the writer.

The proposed modifications will result in increases in the potential to discharge controlled emissions from point sources of 16.86 pounds per hour and 19.25 TPY of particulate matter (PM), of which 8.39 pounds per hour and 10.11 TPY will be particulate matter less than 10 microns in diameter (PM₁₀) and 1.22 pounds per hour and 1.39 TPY will be particulate matter less than 2.5 microns in diameter (PM_{2.5}). Refer to the following table for a summary of the proposed changes in the potential to discharge controlled emissions:

Proposed Increase in Emissions - Goals Coal Company R13-2925	Controlled PM Emissions		Controlled PM ₁₀ Emissions		Controlled PM _{2.5} Emissions	
	lb/hour	TPY	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions						
Stockpile Emissions	+0.28	+1.26	+0.15	+0.66	+0.02	+0.09

Unpaved Haulroad Emissions	+22.02	+54.60	+4.90	+11.11	+0.22	+0.26
Paved Haulroad Emissions	-35.05	-114.66	-17.44	-57.07	-2.58	-8.44
<i>Fugitive Emissions Total</i>	<i>-12.74</i>	<i>-58.80</i>	<i>-12.39</i>	<i>-45.29</i>	<i>-2.34</i>	<i>-8.09</i>
Point Source Emissions						
Equipment Emissions	+19.20	+43.58	+9.41	+21.45	+1.38	+3.12
Transfer Point Emissions	+13.78	+15.69	+6.59	+7.55	+0.99	+1.13
<i>Point Source Emissions Total (PTE)</i>	<i>+16.86</i>	<i>+19.25</i>	<i>+8.39</i>	<i>+10.11</i>	<i>+1.22</i>	<i>+1.39</i>
FACILITY EMISSIONS TOTAL	+4.12	-39.55	-4.01	-35.18	-8.38	-24.62

The proposed modification will result in the following new estimated facility-wide potential to discharge controlled emissions:

New Facility-wide Emissions - Goals Coal Company R13-2925	Controlled PM Emissions		Controlled PM ₁₀ Emissions		Controlled PM _{2.5} Emissions	
	lb/hour	TPY	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions						
Stockpile Emissions	2.64	11.60	1.26	5.52	0.19	0.83
Unpaved Haulroad Emissions	32.33	86.89	9.54	26.65	0.96	2.57
Paved Haulroad Emissions	3.60	11.79	0.72	2.36	0.18	0.59
<i>Fugitive Emissions Total</i>	<i>38.57</i>	<i>110.28</i>	<i>11.52</i>	<i>33.53</i>	<i>1.33</i>	<i>3.99</i>
Point Source Emissions						
Equipment Emissions	60.80	156.87	28.96	74.70	4.35	11.21
Transfer Point Emissions	22.13	37.95	10.54	18.08	1.59	2.72
<i>Point Source Emissions Total (PTE)</i>	<i>82.93</i>	<i>194.82</i>	<i>39.50</i>	<i>92.78</i>	<i>5.94</i>	<i>13.93</i>
FACILITY EMISSIONS TOTAL	121.50	305.10	51.02	126.31	7.27	17.92

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the facility. The proposed modification of a wet wash coal preparation plant will be subject to the following state and federal rules:

45CSR5 *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations*

The facility is subject to the requirements of 45CSR5 because it meets the definition of “Coal Preparation Plant” found in subsection 45CSR5.2.4. The facility should be in compliance with Section 3 (less than 20% opacity) and Section 6 (fugitive dust control system and dust control of the premises and access roads) when the particulate matter control methods and devices proposed within application R13-2925 and any amendments thereto are in operation.

45CSR13 *Permits for Construction, Modification, Relocation and Operation of Stationary*

Fact Sheet R13-2925
Goals Coal Company

Goals Preparation Plant and Screening Facility

Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification is subject to the requirements of 45CSR13 because it will result in an increase in potential controlled emissions greater than six (6) pounds per hour and ten (10) tons per year of a regulated air pollutant (PM and PM₁₀) and will involve the construction and modification of existing equipment subject to NSPS Subpart Y. The applicant has submitted an application for a modification permit. The applicant published a Class I legal advertisement in *The Register-Herald* on December 21, 2011 and submitted \$1,000 for the application fee and \$1,000 for the NSPS fee.

45CSR16 Standards of Performance for New Stationary Sources

40 CFR 60 Subpart Y: Standards of Performance for Coal Preparation and Processing Plants

This wet wash coal preparation plant is subject to 40 CFR 60 Subpart Y because it was constructed and will be modified after October 24, 1974 and processes more than 200 tons of coal per day. The proposed modification includes the construction of three (3) belt conveyors and one (1) open storage pile and modification of existing pieces of equipment which are defined as affected facilities in 40 CFR 60 Subpart Y. Therefore, the proposed construction is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants.

The facility should be in compliance with the following: Section 254(a) (less than 20% opacity for coal processing and conveying equipment, coal storage systems, or coal transfer and loading systems processing coal constructed, re-constructed or modified on or before April 28, 2008); and Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage systems, or coal transfer and loading systems processing coal constructed, re-constructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

45CSR30 Requirements for Operating Permits

In accordance with 45CSR30 Major Source Determination, this wet wash coal preparation plant is not listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The facility's new potential to emit

will be 95.78 TPY for PM₁₀ (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR30 threshold of 100 TPY of a regulated air pollutant used to define a major stationary source. Therefore, the facility will be subject to 45CSR30 and remain classified as a Title V deferred non-major source.

The proposed modification of a wet wash coal preparation plant will not be subject to the following state and federal rules:

45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration

In accordance with 45CSR14 Major Source Determination, this wet wash coal preparation plant is not one of the 100 TPY stationary sources listed under the definition of “Major Stationary Source” in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from open storage piles constructed or modified on or before May 27, 2009 and haulroads) are not included when determining major stationary source applicability. The facility’s new potential to emit will be 201.17 TPY for PM (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR14 threshold of 250 TPY for a regulated air pollutant used to define a major stationary source. Therefore, the proposed modification is not subject to the requirements set forth within 45CSR14.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the pollutants being emitted from this facility are PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the nature and extent of the modifications proposed for this existing facility. This facility is located in Raleigh County, WV, which is currently in attainment for PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter). This facility is not a major source as defined by 45CSR14, therefore, an air quality impact analysis is not required.

MONITORING OF OPERATIONS

For the purposes of determining compliance with maximum throughput limits, the applicant shall maintain certified daily and monthly records. Example forms are included as Appendices A, B and C to Permit R13-2925. An example form for tracking the amount of water applied through

the water truck is included as Appendix D to Permit R13-2925. An example form for the Monthly Opacity Testing is included as Appendix E to Permit R13-2925. The Certification Of Data Accuracy statement shall be completed within fifteen (15) days of the end of the reporting period. These records shall be maintained on site by the permittee for at least five (5) years and shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

CHANGES TO CURRENT PERMITS R13-2188C AND R13-2482B

- Combined the equipment from current permits R13-2188C and R13-2482B into one new permit
- Increase the maximum hourly throughput of railcar loadout silo BS1 from 1,600 TPH to 5,000 TPH and increase the controls on this transfer point to a water spray and partial enclosure
- Increase the maximum throughputs of conveyor C1 from 1,400 TPH and 8,300,000 TPY to 1,600 TPH and 8,715,000 TPY
- Increase the maximum hourly throughput rate for the refuse circuit from 440 TPH to 650 TPH
- Add the three (3) conveyors and one (1) stockpile from the Parker Peerless Mine which were constructed in March of 2008
- Add unpaved haulroad trucking from the surface mine to B1/OS1
- Add a bypass chute from conveyor C12 to conveyor BC13
- Add a partial enclosure to conveyors BC1, BC2, BC6, BC13 and BC16
- Delete permitted equipment which was never constructed or was constructed and then removed
- Renumber the transfer points at the screening section of the facility currently permitted under R13-2482B
- Combine current open storage piles OS3 through OS8 permitted under R13-2188C and rename the new open storage pile as OS1

RECOMMENDATION TO DIRECTOR

The information contained in this modification permit application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. Therefore, the granting of a permit to Goals Coal Company for the modification of their Goals Preparation Plant and Screening Facility located near Sundial, Raleigh County, WV is hereby recommended.

Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

March 22, 2012

Date